



Virginia
Regulatory
Town Hall

Proposed Regulation Agency Background Document

Agency Name:	Virginia Department of Health
VAC Chapter Number:	12 VAC 5-610-10 et seq.
Regulation Title:	Sewage Handling and Disposal Regulations
Action Title:	Amend 12 VAC 5-610-10 et. seq., the Sewage Handling and Disposal Regulations ("Regulations") to establish (i) new site and soil requirements for onsite sewage systems utilizing secondary and advanced secondary treatment; (ii) new design and construction criteria using the concept of a minimum footprint; and (iii) requirements for operating, maintaining, and monitoring onsite wastewater systems.
Date:	December 21, 2001

This information is required pursuant to the Administrative Process Act (§ 9-6.14:9.1 *et seq.* of the *Code of Virginia*), Executive Order Twenty-Five (98), Executive Order Fifty-Eight (99), and the *Virginia Register Form, Style and Procedure Manual*. Please refer to these sources for more information and other materials required to be submitted in the regulatory review package.

Summary

Please provide a brief summary of the proposed new regulation, proposed amendments to an existing regulation, or the regulation proposed to be repealed. There is no need to state each provision or amendment or restate the purpose and intent of the regulation; instead give a summary of the regulatory action and alert the reader to all substantive matters or changes. If applicable, generally describe the existing regulation.

1. Two new parts are proposed (Part V and Part VII). One that assists owners in calculating a footprint (12 VAC 5-610-650 through 651.1, or the land area dedicated for sewage disposal; and

another that outlines the operation and maintenance needs for sewage systems (12 VAC 5-610-1150 through 1210). Part VII further describes management levels (12 VAC 5-610-1150).

2. The proposed amendments require owners to record a dedication document to permanently dedicate the footprint for sewage system use and repair. (12 VAC 5-610-280).

3. Site and soil conditions previously considered unusable for dispersing effluent may now be considered with appropriate management and treatment (12 VAC 5-610-593).

4. Part III, Sewage System Based on Site Conditions, (12 VAC 5-610-450 through 500) provides for consideration of soil texture, structure, and grade. Structure and grade were not formally considered in the past regulatory environment. Sandy Clay Loam textures are proposed to be considered as a Texture Group III instead of II (12 VAC 5-610-490).

5. Part IV, Article IV includes tables that allow reduced separation distances to limiting factors than previously allowed. The vertical separation distance reflects the effluent quality (Table 4.1 through Table 4.3).

6. Part VI (12 VAC 5-610-670 through 880) requires designs to reflect actual flows instead of including a safety factor. Designs will also reflect the concept that larger homes tend to generate greater wastewater amounts. It allows engineers to use their professional judgement when determining design flows for commercial and residential projects.

7. Part VI places prescriptive design criteria on VDH designs but acts as guidance for AOSEs and engineers. The design criteria does not require private sector designs to comply with all of the prescriptive design criteria used by VDH (12 VAC 5-610-660).

8. Part III, Sewage System Based on Site Conditions, (12 VAC 5-610-450 through 500) introduces the concept of saturated hydraulic conductivity as the Department's method to estimate or measure permeability.

Basis

Please identify the state and/or federal source of legal authority to promulgate the regulation. The discussion of this statutory authority should: 1) describe its scope and the extent to which it is mandatory or discretionary; and 2) include a brief statement relating the content of the statutory authority to the specific regulation. In addition, where applicable, please describe the extent to which proposed changes exceed federal minimum requirements. Full citations of legal authority and, if available, web site addresses for locating the text of the cited authority must be provided. Please state that the Office of the Attorney General has certified that the agency has the statutory authority to promulgate the proposed regulation and that it comports with applicable state and/or federal law.

Statutory authority for the amendments is found in §§ 32.1-12 and 32.1-164 of the Code of Virginia. The website URLs citing this authority are < <http://leg1.state.va.us/cgi-bin/legp504.exe?000+cod+32.1-12> > and < <http://leg1.state.va.us/cgi-bin/legp504.exe?000+cod+32.1-164> >. The Board of Health has responsibility for the safe and sanitary collection, conveyance, treatment, and disposal of sewage as they affect public health and welfare. In addition, the Board is required, in discharging its responsibility for safe and sanitary sewage treatment and disposal, to exercise due diligence to protect the quality of both surface and ground water. The Office of Attorney General has certified that the Department has the authority to promulgate the proposed regulations and that it comports with applicable state and federal law.

Purpose

Please provide a statement explaining the need for the new or amended regulation. This statement must include the rationale or justification of the proposed regulatory action and detail the specific reasons it is essential to protect the health, safety or welfare of citizens. A statement of a general nature is not acceptable, particular rationales must be explicitly discussed. Please include a discussion of the goals of the proposal and the problems the proposal is intended to solve.

The rulemaking provisions are mandatory by the Regulations. Section 370 of the 1982 Regulations and Sections 441 through 448 require VDH to incorporate systems that successfully complete their experimental protocol and receive general approval. VDH received public comments during the rulemaking process of the 2000 Regulations stating that VDH should require operation and maintenance for sewage systems. Title 9-6.14:7.1 of the Code of Virginia states that agencies will consider public comments and petitions for rulemaking.

The primary purpose of these amendments are to protect public health by protecting the quality of ground and surface waters (statutory mandate to exercise due diligence, Code of Virginia, 32.1-164). The Department's onsite regulations are increasingly viewed as part of the overall water quality protection strategy of the Commonwealth. The Department has been working closely with the Department of Environmental Quality, the Department of Conservation and

Recreation, and others in their water quality initiatives (Water Quality Improvement Act). These agencies have continued to express concerns about the impact of failing drainfields and inadequate onsite regulations on water quality.

Substance

Please identify and explain the new substantive provisions, the substantive changes to existing sections, or both where appropriate. Please note that a more detailed discussion is required under the statement providing detail of the regulatory action's changes.

1. Estimating and measuring Ksat data instead of using percolation concepts.

The percolation test has been in the regulatory framework since the adoption of the 1972 Regulations. However, this test is time consuming (typically requiring two or more days to complete). The percolation test is also expensive and not widely used by consultants or VDH. It has sporadic use in a few Virginia counties. Cheaper and faster methodologies exist, namely permeameter tests that provide saturated hydraulic conductivity (Ksat) results. The Ksat test is more widely used and recommended by private consultants to design sewage systems because it is completed faster (within hours), provides more consistent results than the percolation test, and is cheaper to conduct.

The proposed amendments eliminate the percolation test as the only method to evaluate permeability of the soil. VDH anticipates that Ksat readings, as opposed to percolation test data, will save owners and developers money and time because of the differences in test methodologies. Incorporation of Ksat will also encourage consultants to perform more detailed evaluations because percolation test data was typically cost prohibitive under the past regulatory scheme.

Most research performed by the academia arena uses Ksat data as opposed to percolation data. VDH will more easily evaluate research in the onsite field because the regulations will incorporate Ksat data.

2. Includes five management levels for all onsite sewage systems permitted under the proposed amendments. Requires operation and maintenance for all systems except those that are installed prior to the adoption of the amendments. VDH will register persons who provide operation and maintenance.

In its April 1997 report to Congress on the use of onsite systems, the Environmental Protection Agency (EPA) stated that "adequately managed decentralized wastewater treatment systems can be a cost effective and long-term option for meeting public health and water quality goals, particularly for small suburban, and rural areas."

On September 26, 2000, the EPA proposed "voluntary national guidelines in order to raise the quality of management programs, establish minimum levels of activity, and institutionalize the concept of management" for onsite sewage systems. VDH proposes to align itself with the national guidelines and is developing a database to allow management and oversight of sewage systems.

Better management of sewage systems will provide owners with valuable knowledge regarding their sewage system operation. Owners would schedule needed maintenance (i.e. pumping the septic tank on a regular frequency), hire others to perform required maintenance, or would seek a management level whereby a third party (sewer authority, other government entity, or private utility) would maintain and report to the local health department.

Better management would also assure that systems last longer and provide adequate protection of groundwater supplies and public health. Systems that are not properly monitored, operated, or maintained fail prematurely and create unnecessary and expensive repair costs. Proper management of a system is cheaper than dealing with early and expensive repairs that adversely affect groundwater and public health.

3. Site and soil evaluations include an examination of the soil structure and its grade (cohesiveness). Sandy Clay Loam ("SCL") moved from Texture Group II to Texture Group III.

Under past regulatory requirements, soil structure and grade were not considered in estimating a percolation rate. However, consultants could estimate a different rate from the anticipated range if "soil structure" and "experience" indicated.

The proposed amendments reflect research by professors E.J. Tyler and R.B. Reneau. Dr. Reneau suggested that VDH move sandy clay loam soils into Texture Group III and allow for a wider range of permeabilities related to soils within the texture groups according to structure and grade. VDH believes that these amendments reflect the best available information for estimating permeability of soils to date.

4. Establishes footprint and requires owners to record dedication document of survey located footprint

Using concepts of linear loading, organic loading, effluent quality, dispersal method, and sensitivity of the receiving environment, VDH proposes two methods to calculate a "footprint". Footprint is the area certified by VDH for the eventual design of a sewage system. VDH does not plan to require persons to draft a design within the footprint until an owner is ready to build.

The Committee and VDH believes that the footprint must be recorded in the land records to dedicate the land area for sewage disposal. Recordation will assure that all future owners are properly informed and adequately protect this area for sewage system design and repair.

5. Allows persons to design sewage systems based on actual flows. Requires increased flow design as house size increases.

Engineers and consultants are required to design sewage systems based on flows that do not reflect actual water use. This requirement has created confusion and in some cases, engineers believe that the regulatory scheme could cause inadequate designs. Standard engineering practice places a safety factor into the design. In the proposed amendments, designers have asked VDH to place this safety factor on the footprint instead of the design flows. They believe that by using actual flow estimates, VDH will better meet the needs of owners of onsite sewage systems.

Despite a desire to move toward performance monitoring, the Committee felt that VDH should have a certain level of prescription in its design. They recommended that VDH use the equation, " $Q = 40 + 35 * (\text{number of persons})$ ", for residential designs. They also felt that VDH should prescribe an increase based on situations where flows could be anticipated higher, such as for larger homes.

The proposed amendments include this prescription for residential designs but allows professional engineers to alter this design when justified. The amendments will assure that owners receive sewage system designs that will better reflect their water usage and thereby avoid unnecessary expenses.

6. Allows reduced standoff distance to limiting factors when using better quality effluent.

Substantial research shows that viral and bacterial pathogens are sufficiently reduced with better treated effluent. Because of the reduced potential for groundwater contamination and sickness, VDH and the Committee believes that use of sensitive environments is possible. Using more environmentally sensitive areas will help assure that valuable farmland may remain intact because development will not be limited to the best soils.

Virginia owners may also experience increased property value as land that could not be developed under the past regulatory environment, could be developed under the proposed amendments. VDH anticipates that as more owners try to develop more sensitive areas, the demand will create cheaper installations. Septic contractors, who are generally unfamiliar with installing treatment devices will become more familiar with them. Manufacturers of treatment devices will enter the marketplace and where there were just a few options available to an owner, several might be possible with a competitive pricing influence.

7. Introduces the concepts of land application such as spray irrigation, surface drip, or near surface installations.

Owners in Virginia have faced an ironic dilemma in the past. Under the Alternative Discharging Regulations, owners could treat wastewater and discharge it into a creek, stream, or dry ditch. However, they could not treat the wastewater to the same level and discharge it into the soil. The proposed amendments will remove this irony. Owners who treat their wastewater to a level that can be discharged into a stream, creek, or dry ditch (on top of the ground) may now also propose to discharge it into the soil environment.

8. Introduces and distinguishes the concepts of "water table", "soil wetness feature", and "redoximorphic features". References the U.S. Department of Agriculture, National Resource Conservation Service's field book on the proper description of soil.

The Virginia Department of Health, Department of Environmental Quality, and the U.S. Department of Commerce-Office of Ocean and Coastal Resources Management completed the "Water Table Study for Nitrate management and Improved Site Evaluation for Wastewater Treatment" in December 2001. This study mentions that Virginia's current regulatory program does not include current soil concepts in describing soil wetness below the ground's surface.

The Regulations currently define "water table" as the depth below the ground's surface where gray mottles (Chroma 2 or less) appear. This definition is inadequate, creates miscommunication with customers, and does not reflect current understanding within the soil science community. VDH staff have witnessed the difficulty of explaining to a citizen that they are denied a construction permit because a "water table" is present; yet, there is no free water to observe.

The proposed amendments allow Virginia to use the most current knowledge dealing with soil wetness by moving from the concept of a "water table". The water table study recently completed states that a seasonal water table or water table may be present without the regulatory indicators of "gray mottles" being present. Thus, the current regulations may permit inadequate systems because the standard states that "gray mottles" must be present to show a water table. This definition does not recognize that soil saturation without reduction (gray mottles) may occur.

Soil wetness features and redoximorphic features indicate that a particular soil cannot adequately treat and dispose of wastewater. By using this terminology and creating a more adequate definition for water table, VDH will have better tools to communicate and accurately reflect site and soil limitations.

9. Provides that private sector design recommendations will have limited prescription so that qualified professionals (Authorized Onsite Soil Evaluators and professional engineers) may design a system within the footprint without burdensome regulation.

Public health and groundwater supplies will be better protected under the proposed amendments because (1) a highly skilled professional community can submit designs, (2) VDH will have program oversight and provide for quality assurance, (3) sufficient land area (footprint) will be dedicated by deed for the treatment and dispersal of wastewater, (4) operation and maintenance of sewage system is required by registered and approved persons, and because (5) VDH will have a database to track sewage systems and provide program oversight.

The proposed amendments will assure a minimum design requirement, require operation and maintenance, provide for quality assurance and program oversight, and provide for sufficient land area in the event that a system fails sooner than expected. For systems that disperse septic tank effluent with little management, VDH has proposed a footprint that will assure that a 100%

repair area will be provided. For systems dispersing treated effluent, VDH has again assured that a repair system can be installed in the event of failure.

Only professional engineers and Authorized Onsite Soil Evaluators (AOSE) will have the authority to submit design recommendations to VDH. Professional engineers hold a license in Virginia and VDH has program responsibility for the AOSE community. The proposed AOSE regulations require significant education, training, testing, and experience for those wishing to be certified as an AOSE.

Issues

Please provide a statement identifying the issues associated with the proposed regulatory action. The term "issues" means: 1) the primary advantages and disadvantages to the public, such as individual private citizens or businesses, of implementing the new or amended provisions; 2) the primary advantages and disadvantages to the agency or the Commonwealth; and 3) other pertinent matters of interest to the regulated community, government officials, and the public. If there are no disadvantages to the public or the Commonwealth, please include a sentence to that effect.

The primary advantage to the proposals is the enhanced protection of groundwater resources from contamination by onsite sewage disposal systems. The monitoring and maintenance requirements assure systems are running efficiently and satisfactorily. This saves owners of businesses from expensive repairs due to lack of inspections.

The proposed amendments establish a conceptual framework to fairly and equally apply technology in the onsite industry. The amendments align the state with federal recommendations regarding the operation, maintenance, and management of sewage systems as well as the methodology to describe site and soil conditions. VDH believes that the amendments will:

1. Allow more effective and detailed approvals
2. Allow permitting of sites previously rejected
3. Require proper operation and maintenance of sewage systems
4. Encourage onsite system management by following EPA guidance
5. Conserve valuable farm land
6. Provide better protection of ground and surface waters
7. Allow free market forces to work
8. Encourage equal treatment to all private and proprietary system designs
9. Encourage use of new technologies and better treatment processes
10. Encourage data collection for better program management
11. Remove inconsistencies with other regulations

Potential Issues.

Four issues remain a concern with certain stakeholders regarding the proposed amendments. These include:

1. Potential for increased costs to developers and owners as a result of requiring management of sewage systems.
2. Potential for increased training needs for private sector and local health department staff as a result of the proposed regulatory changes.
3. Potential concern that VDH does not have the resources to implement the program outlined in the proposed amendments. The amendments create a new regulatory paradigm in Virginia with new roles for the Virginia Department of Health.
4. Potential for criminal enforcement of minor operation & maintenance violations.

The agency is aware of no disadvantages to the public, the Commonwealth or the agency that adoption of these regulations would entail.

Fiscal Impact

Please identify the anticipated fiscal impacts and at a minimum include: (a) the projected cost to the state to implement and enforce the proposed regulation, including (i) fund source / fund detail, (ii) budget activity with a cross-reference to program and subprogram, and (iii) a delineation of one-time versus on-going expenditures; (b) the projected cost of the regulation on localities; (c) a description of the individuals, businesses or other entities that are likely to be affected by the regulation; (d) the agency's best estimate of the number of such entities that will be affected; and e) the projected cost of the regulation for affected individuals, businesses, or other entities.

VDH does not anticipate additional costs to the state to implement and enforce the regulation. Existing staff should absorb the regulatory requirements into their work duties. VDH does not anticipate costs to localities from the proposed amendments.

Local government and developer objections to economic impacts would be more significant if sewage systems become more expensive and cause owners to build less expensive home to compensate. VDH believes that the proposed amendments will not affect the overall value or the number of statewide housing units. Instead, the amendments may allow development of property not currently used for development or cause certain owners to purchase property that will allow a less expensive alternative.

The projected cost of the proposed amendments for stakeholders should balance over the long run. Additional up-front costs to operate and maintain sewage systems, including repair areas and requiring dedication documents, should balance the future cheaper costs to repair those systems. With continual operation and maintenance, VDH anticipates that owners will experience fewer and less-expensive repairs.

Currently, owners may choose to ignore their sewage systems until they experience a back-up into the dwelling or expose partially treated sewage on the ground's surface. Waiting for these signs of malfunction do not adequately protect groundwater supplies and public health and cause more difficult and expensive repairs. The proposed amendments address this problem by recognizing the universal acceptance that all sewage systems must be properly operated and maintained. Proper operation and maintenance will assure Virginia's valuable water resources are protected and provide incentives to owners to adequately maintain their systems.

VDH believes that the proposed amendments represent the philosophy of "an ounce of prevention is worth a pound of cure". Minimal operation and monitoring requirements are proposed and they will have two primary effects. First, sewage systems will last longer and allow cost effective use. Next, owners will experience less costly repairs. Owners will find problems sooner before expensive repair needs develop.

VDH expects operation and maintenance to cost between \$250.00 to \$500.00 dollars per year, depending on the sensitivity of the receiving environment and the complexity of the sewage system. Longer lasting systems and the need for fewer repairs will offset these front-end costs down the road. Today, owners may choose to ignore and neglect the operation and maintenance needs for their sewage systems. If owners adequately operated and maintained their sewage systems, then they would expect similar costs (\$250.00 to \$500.00) for that oversight.

The Office of Environmental Health Services and the local county health departments will experience a one-time cost to provide for initial staff training about the proposed amendments. The Virginia Department of Health will experience higher continuing educational costs to maintain a high level of staff competence. VDH expects higher training costs for new hires to assure sufficient competency levels. After initial training is complete and greater continued educational needs are addressed, VDH does not expect the need for additional employees beyond its current needs for program implementation. VDH anticipates that a better trained and more competent staff will meet its customer needs.

The proposed amendments do not mandate any locality to take additional actions. The amendments include a provision for localities to form maintenance entities for sewage systems and localities may choose to become more involved in the operation and maintenance of onsite sewage systems. Because localities may voluntarily form maintenance entities, VDH does not anticipate costs beyond what the regulations may currently include.

Detail of Changes

Please detail any changes, other than strictly editorial changes, that are being proposed. Please detail new substantive provisions, all substantive changes to existing sections, or both where appropriate. This statement should provide a section-by-section description - or cross-walk - of changes implemented by the proposed regulatory action. Where applicable, include citations to the specific sections of an existing regulation being amended and explain the consequences of the proposed changes.

1. Two new parts are proposed (Part V and Part VII). One that assists owners in calculating a footprint (12 VAC 5-610-650 through 651.1, or the land area dedicated for sewage disposal; and another that outlines the operation and maintenance needs for sewage systems (12 VAC 5-610-1150 through 1210). Part VII further describes management levels (12 VAC 5-610-1150).
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Alternatives

Please describe the specific alternatives to the proposal considered and the rationale used by the agency to select the least burdensome or intrusive alternative that meets the essential purpose of the action.

The current regulations do not fully recognize the benefits of increased levels of pretreatment, which include the option to use sites with more restrictive soil conditions and utilizing less land area than conventional septic systems. The current regulations also do not provide for proven technologies to easily become accessible for the public's use. The essential purpose of the new regulation is to recognize the benefits of pretreatment and to allow proven technologies easier access to consumers. The only way to accomplish this is to modify the Regulations.

The Sewage Handling and Disposal Regulations establish prescriptive design criteria for generic type systems (typically gravel trench system but also including enhanced flow systems, low pressure distribution, Wisconsin Mounds, and sand-on sand). These criteria are based on assumptions the Department has made relative to the application, materials employed, and anticipated life expectancy of the system. These assumptions while valid frequently are not the only valid set of assumptions on which to base a design. The current regulations prevent citizens from seeking system designs based on assumptions other than those used by the Department of

Health. Professional Engineers, or other certified designers, using conventional or proprietary technology may find it advantageous to their clients to apply design criteria other than that used by the Department. The essential purpose of the new regulation is to allow alternative design criteria in a manner that provides essential public protection. The only way to accomplish this is to modify the Regulations.

The proposed amendments will include monitoring and maintenance requirements for all systems. These requirements were suggested during the adoption process of the final Regulations published August 16, 1999 in the Virginia Register. The essential purpose of this regulation is assuring that maintenance is provided for all systems on a schedule appropriate for the complexity and component reliability of the regulated system. Other options considered were public education and maintenance entities. Public education is an essential component of operation and maintenance but by itself does not provide sufficient incentive to assure compliance. Maintenance entities or utilities may be a viable alternative to assure O&M of onsite systems but the current infrastructure is not capable of handling residential onsite systems. The Department is evaluating what changes are necessary to empower existing utilities to take on this function.

Public Comment

Please summarize all public comment received during the NOIRA comment period and provide the agency response.

The Department received one public comment during the NOIRA. Bob Mayer, President of the National Onsite Wastewater Recycling Association ("NOWRA"), asked why VDH could not wait on the National Performance Model Program being developed by NOWRA.

When the Department spoke to Mr. Mayer about when NOWRA might develop such a program, he stated that it was two to three years away--2003 or 2004. VDH believes that it cannot wait on such a model program to develop, with unknown criteria, and little input from the citizens of the Commonwealth. By developing proposed regulations now, VDH will assure that the Regulations reflect best industry practices and have the full benefit of input by Virginia citizens in a timely manner. The proposed amendments will assure that Virginia citizens will have input on regulations that reflect Virginia's specific needs instead of relying on a generic national code.

Clarity of the Regulation

Please provide a statement indicating that the agency, through examination of the regulation and relevant public comments, has determined that the regulation is clearly written and easily understandable by the individuals and entities affected.

VDH has revised numerous sections of the regulation to remove the "passive voice" and replace it with the "active voice". Shorter sentences, more clearly written, have replaced longer and

more difficult language. VDH has attempted to write the proposed amendments for a reading level that reflects Virginia's population.

VDH drafted the proposed amendments four times working with a technical advisory committee. Members included persons working in the academic field and industry. The committee, comprising Virginia's stakeholder organizations, assisted in writing the proposed amendments so that they would be easily understandable.

Periodic Review

Please supply a schedule setting forth when the agency will initiate a review and re-evaluation to determine if the regulation should be continued, amended, or terminated. The specific and measurable regulatory goals should be outlined with this schedule. The review shall take place no later than three years after the proposed regulation is expected to be effective.

No later than January 2, 2005, the Department will initiate a review of the amendments to determine whether it should be continued, amended, or terminated. This review will include inquiries to local governments to assess the effectiveness of the regulations and to highlight any unresolved conflicts with local ordinances and procedures. Also included in the review will be an assessment and summary of all instances statewide where lots or projects were denied only due to the enforcement of these two proposals. The Sewage Handling and Disposal Advisory Committee is another resource for the periodic review.

Family Impact Statement

Please provide an analysis of the proposed regulatory action that assesses the potential impact on the institution of the family and family stability including the extent to which the regulatory action will: 1) strengthen or erode the authority and rights of parents in the education, nurturing, and supervision of their children; 2) encourage or discourage economic self-sufficiency, self-pride, and the assumption of responsibility for oneself, one's spouse, and one's children and/or elderly parents; 3) strengthen or erode the marital commitment; and 4) increase or decrease disposable family income.

The regulation is expected to result in some economic impact that may translate to higher costs for homes and businesses that utilize onsite systems when they are first installed. The possible operation and maintenance costs may affect disposable income in the short run but will provide savings in the long-run. The short run costs are anticipated to be offset by cheaper repairs and fewer failed systems in the long run.

The proposed amendments encourage self-sufficiency because the amendments allow owners and professionals to exercise their own judgement in deciding how to implement their wastewater needs. Fewer prescription is placed on the designs of sewage systems and encourage ownership of the system. Protecting the quality of life by preserving the environment is a positive benefit that can strengthen the Commonwealth's economy and its families.